

Claims

1. Reactor (1; 1A) for solid phase synthesis comprising a vessel (2), a filter (3; 3A; 3B; 3C; 3D) arranged in the vessel (2) and a filtrate outlet (4) for evacuating the filtrate out of the filter, the filter being connected to the filtrate outlet (4), characterized in that it
5 comprises means (3; 4; 3A; 3B; 3C; 3D) for delivering a gas into the vessel (2) in a region of the vessel (2) near to the bottom (24) of the vessel (2) and beside the filter (3; 3A; 3B; 3C; 3D).

2. Reactor (1; 1A) according to claim 1, characterized in that the filter comprises a filter cartridge (3; 3A; 3B; 3C; 3D), preferably a filter candle.

10 3. Reactor (1; 1A) according to claim 2, characterized in that the filter cartridge (3; 3A; 3B; 3C; 3D) comprises an intermediate bottom (32; 32D) separating the filter cartridge (3; 3A; 3B; 3C; 3D) in a lower chamber (31; 31D) connected to the filtrate outlet (4) and an upper chamber (30; 30D); and a one-way valve (33; 33D) connecting the upper chamber (30; 30D) with the lower chamber (31; 31D) such that the intermediate
15 bottom (32; 32D) is pervious in direction from the upper chamber (30; 30D) to the lower chamber (31; 31D) but not in direction from the lower chamber (31; 31D) to the upper chamber (30; 30D).

4. Reactor (1; 1A) according to claim 3, characterized in that the filtrate outlet (4) comprises a gas inlet (40; 40A) for delivering the gas into the vessel (2) through the lower
20 chamber (31; 31D) of the filter cartridge (3; 3A; 3B; 3C; 3D).

5. Reactor (1; 1A) according to one of claims 1 to 4, characterized in that the vessel (2) comprises a plurality of filters (3; 3A; 3B; 3C; 3D).

6. Reactor (1; 1A) according to one of claims 1 to 5, characterized in that the vessel (2) comprises a double casing (20) for temperature regulation.

25 7. Reactor (1; 1A) according to one of claims 1 to 6, characterized in that the filter (3; 3A; 3B; 3C; 3D) or filters comprise a slotted screen filter medium.

8. Reactor (1; 1A) according to one of claims 1 to 7, characterized in that the vessel (2) comprises a filtrate inlet (21) connected to the filtrate outlet (4) such that the filtrate can return from the filtrate outlet (4) via the filtrate inlet (21) into the vessel (2).

30 9. Reactor (1; 1A) according to one of claims 1 to 8, characterized in that the vessel (2) comprises an exhaust (22; 22A) connected to the means (3; 4; 3A; 3B; 3C; 3D) for delivering the gas such that the exhausted gas can return back into the vessel (2).

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10. Reactor (1; 1A) according to one of claims 1 to 9, characterized in that it comprises a cascade of vessels (2) each comprising an exhaust (22; 22A), which vessels (2) are connected together in such a way that the exhaust (22; 22A) of one vessel (2) is connected to the means (3; 4; 3A; 3B; 3C; 3D) for delivering the gas of the following
5 vessel (2).